

ECONOMICS OF TRANSPORT INFRASTRUCTURE I INVESTMENTS AND POLICY



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WHY INVESTMENTS?

- Capacity Augmentation due to increase in demand
- Reduction in costs for addressing problems in pricing
- New technology to take care of competition or regulatory compulsion



ECONOMIC ISSUES

- Consumption of resources
- Issues of Inter Sectoral allocation



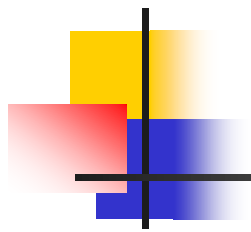
POLICY ISSUES

- Rural Development
- Urban Development
- Industrialization



Contd.

- Catalyst for economic growth
- Development of Markets
- Integration with Global Economy



TRANSPORT



DEMAND FOR TRANSPORT

- Transport is spatial displacement of goods and persons for socio economic activity
- It consumes resources and therefore the question of how much is central to Economic Planning



FORECASTING

- Ability to understand the socio economic trends
- Short term easier
- Long term determined by the validity of the models as both ability to pay and the wisdom of paying transportation costs may undergo a radical change



TRANSPORT COSTS

- A functional relation between the transport output and the consumption of resources measured in financial terms
- Marginal Costs
- Normally classified in terms of costs of
 - i) operators
 - ii) users
 - iii) social



OPERATORS

- ALLOCATION OF COSTS
 - joint/common
- INDIVISIBILITIES OR MINIMUM ECONOMIC UNIT OF INVESTMENT
 - long/short term
- ECONOMIES/DIS ECONOMIES INDICATING LINEARITY OR NON LINEARITY BETWEEN INPUT AND OUTPUT



USERS

- **GENERALISED COST**
- $C = F + vT$, where F is the monetary value and T , the time spent converted to monetary value by the factor v , the value of time



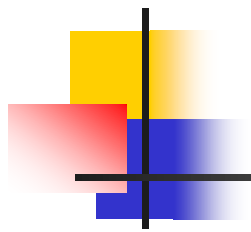
SOCIAL COSTS

- **RESOURCE COST**
- opportunity costs
- **EXTERNAL COSTS**
- congestion
- pollution
- safety
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PRICING

- Outlines significant characteristics of the industry as affects volumes and therefore revenue,
- key decision factor in a free market economy
- Efficiency Pricing



POLICY

CONTOURS OF TRANSPORT POLICY



- Define the relative inter sectoral importance
- Define modal split
- Focus on the legal aspects



ALLOCATIVE EFFICIENCY

- Optimal use of resources
- Question of Public good
- Question of payment of user charges
- Question of marginal social cost versus marginal cost
- Question of subsidy----internal versus external
- Question of modal split



FINANCIAL VIABILITY

- Strategies for revenue generation
- Strategies for expenditure control
- Strategies for investment
- Tariff policy
- Capital output ratio



SAFETY

- Economic loss
- Loss of image
- Increased costs
- Failure to meet targets



Environment

- Question of noise pollution
- Question of air pollution
- Loss of value of property
- Increasing anxiety for use of facilities by a feeling of deprivation



ACCESSIBILITY

- Question of right to mobility
- Question of affordability
- Question of congestion leading to increased costs



LAND USE

- Problem of urbanization
- Problem of ribbon development
- Problem of Central Business District(CBD)
 - congestion pricing
- Growth of cities - suburban, conurbations
- Regional Development



SEVERITY

- Spoiling of the landscape
- Dividing communities
- Question of right of way conflicting with changing travel patterns of the population



FINANCING

- Budgetary Support of the Government
- Generation of Internal Resources
- Bilateral/Multilateral Aid
- Market Borrowings
- Alternate financing schemes
- Special Purpose Vehicles



RESEARCH

- Commitment of resources, government or private
- Public versus private transport
- Use of IT



ECONOMIC REGULATION

- Intervention by government in imperfect market to prevent exploitation as well as bring about allocative efficiency
- “Rolling back of the frontiers of the State”-----Margaret Thatcher
- Deregulation and restructuring of the transport Industry



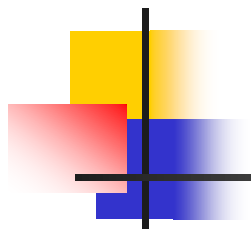
COMPETITION / REGULATION

- Question of monopoly
- Question of what to regulate
- Question of contestability



Bibliography

- Economics Paul A Samuelson
- Transport Economics Kenneth Button
- Applied Transport Economics Stuart Cole
- The End of Poverty Jeffrey Sachs



THANK YOU